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CLAIMS

What is claimed is:

1.　A method for transmitting media packets, comprising:

5　receiving media packets in a first order; and

transmitting said media packets in a second order, wherein said second order is selected according to loss characteristics of a downstream channel, and wherein said second order results in reduced distortion with respect to a predicted distortion from said first order.

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2.　The method of Claim 1 wherein media packet losses resulting from said second order is in a pattern of isolated losses.

3.　The method of Claim 1 further comprising storing said media 15　packets in said first order prior to said transmitting.

4.　The method of Claim 1 further comprising determining said second order by a schedule adapter.

20　5　The system as described in Claim 4 wherein said schedule adapter is an interleaver.

6.　The system as described in Claim 4 wherein said schedule adapter is a packet scheduler, said packet scheduler being computer-25　readable code, said code programmable to perform as an interleaver.

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7.   The method of Claim 4 further comprising selecting said schedule adapter from a plurality of selectable schedule adapters.

5   8.   The method of Claim 7 further comprising:

predicting for each of said plurality of selectable schedule adapters a corresponding amount of distortion; and

selecting one of said plurality of selectable schedule adapters according to said predicted distortion.

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9.   The method of Claim 1 further comprising estimating said loss characteristics from channel characteristics data received from a downstream device.

15   10.   The method of Claim 9 wherein said downstream device sends, in real-time, said channel characteristics data corresponding to each packet received, back to a sender system.

11.   The method of Claim 9 wherein said downstream device

20   accumulates said channel characteristics data for sending at a predetermined interval.

12.   The method of Claim 9 wherein said loss characteristics are selected from a group consisting essentially of:

25   time between losses;

number of isolated packet losses;

number of sequential packet losses;

end-to-end delay for each packet;

number of said media packets lost in each of said sequential

5   packet losses;

packets received/lost pattern; and

time of receipt of each packet.

13.   The method of Claim 12 further comprising predicting distortion

10   produced from various of said loss characteristics in combination with

various schedule adapter configurations and storing said predicted distortion

results as basis for future selecting of said second order for minimizing said

distortion.

15   14.   The method of Claim 1 wherein said selecting said second

order is by an interleaver selector.

15.   The method of Claim 1 wherein said selecting said second

order is by a switch and wherein said switch transmits said media packets

20   alternately among a plurality of downstream channels.

16.   A schedule adapter for receiving media packets in a first order

and transmitting said media packets in a second order wherein said second

order is selected to reduce distortion with respect to said first order based on

25   estimated channel characteristics.

17.   The schedule adapter as described in Claim 16 wherein said media packets are stored prior to transmitting.

5   18.   The schedule adapter as described in Claim 16 wherein said second order is determined by an interleaver.

19.   The schedule adapter as described in Claim 16 wherein said second order is determined by a packet scheduler, said packet scheduler

10   being computer-readable code, said code programmable to perform as an interleaver.

20.   The schedule adapter as described in Claim 16 wherein said schedule adapter is selected from a plurality of schedule adapters.

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21.   The schedule adapter of Claim 20 wherein, for each of said plurality of selectable schedule adapters, a corresponding amount of distortion is predicted and one of said plurality of selectable schedule adapters is selected according to said predicted distortion.

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22.   The schedule adapter as described in Claim 16 wherein said channel characteristics are estimated from channel characteristics data received from a downstream device.

23.   The schedule adapter as described in Claim 22 wherein said downstream device sends, in real-time, said channel characteristics data corresponding to each packet received, back to said system.

5   24.   The schedule adapter as described in Claim 22 wherein said downstream device accumulates said channel characteristics data for sending at a predetermined interval.

25.   The schedule adapter of Claim 16 wherein said second order

10   is selected by an interleaver selector.

26.   The schedule adapter of Claim 16 wherein said second order is selected by a switch and wherein said switch transmits said media packets alternately among a plurality of downstream channels.

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27.   The schedule adapter of Claim 16 wherein distortion produced from various of said loss characteristics in combination with various interleaver configurations is predicted and said predicted distortion results are stored as basis for future selecting of said second order for minimizing

20   said distortion.

28.   A channel characteristics estimator configured to receive channel loss data for a downstream channel and estimate loss characteristics of said channel loss data, wherein said loss characteristics

25   are chosen from a group consisting essentially of:

time between losses;

number of isolated packet losses;

number of sequential packet losses;

end-to-end delay for each packet;

5   number of said media packets lost in each of said sequential

packet losses;

packets received/lost pattern; and

time of receipt of each packet..

10   29.   A computer-usable medium having computer-readable code

embodied therein for causing a computer system to perform a method of

converting burst losses of media packets in a second order into isolated

losses in relation to a first order of media packets in a media transmission,

comprising:

15   receiving encoded media packets in said first order; and

transmitting said media packets in said second order that is selected

according to loss characteristics of a downstream channel.

30.   The computer-usable medium as described in Claim 29

20   wherein said media packets are stored prior to transmitting.

31.   The computer-usable medium as described in Claim 29

wherein said second order is determined by a schedule adapter.

32   The computer-usable medium as described in Claim 31 wherein said schedule adapter is an interleaver.

33.   The computer-usable medium as described in Claim 31

5   wherein said schedule adapter is a packet scheduler, said packet scheduler being computer-readable code, said code programmable to perform as an interleaver.

34.   The computer-usable medium as described in Claim 31

10   wherein said schedule adapter is selected from a plurality of schedule adapters.

35.   The computer-usable medium of Claim 34 wherein, for each of said plurality of selectable schedule adapters, a corresponding amount of

15   distortion is predicted and one of said plurality of selectable schedule adapters is selected according to said predicted distortion.

36.   The computer-usable medium as described in Claim 29 wherein said loss characteristics are estimated from channel characteristics

20   data received from a downstream device.

37.   The computer-usable medium as described in Claim 36 wherein said downstream device sends, in real-time, said channel characteristics data corresponding to each packet received, back to said

25   system.

38.   The computer-usable medium as described in Claim 36 wherein said downstream device accumulates said channel characteristics data for sending at a predetermined interval.

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39.   The computer-usable medium as described in Claim 36 wherein said loss characteristics are chosen from a group consisting essentially of:

time between losses;

10   number of isolated packet losses;

number of sequential packet losses;

end-to-end delay for each packet;

number of said media packets lost in each of said sequential packet losses;

15   packets received/lost pattern; and

time of receipt of each packet.

40.   The computer-usable medium of Claim 39 wherein distortion produced from various of said loss characteristics in combination with

20   various interleaver configurations is predicted and said predicted distortion results are stored as basis for future selecting of said second order for minimizing said distortion.

41.   The computer-usable medium of Claim 29 wherein said

25   second order is selected by an interleaver selector.

42. The computer-usable medium of Claim 29 wherein said second order is selected by a switch and wherein said switch transmits said media packets alternately among a plurality of downstream channels.

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